

MCDOWELL ROAD BASIN AND STORM DRAIN DESIGN

Supervisor Don Stapley, District 2

Project Overview

The Flood Control District of Maricopa County, in partnership with the City of Mesa, has begun design of the McDowell Road Basin and Storm Drain project. This project will be located along McDowell Road between Hawes and Sossaman roads (also known as 76th St.).

The project is being designed as part of the Spook Hill Area Drainage Master Plan (ADMP) study which was completed by the District in 2002. This is the first project to be designed in accordance with the ADMP guidelines. There will be other projects to follow which will result in a regional master planned drainage system.

At the east end of the project, the McDowell Road storm drain will connect to an existing private drainage system at Hawes Road. At the west end of the project, a detention basin will be located at the southwest corner of Sossaman and McDowell roads. A detention basin will store and slowly discharge water downstream. The storm drain and outlet from the detention basin will connect to the existing private channel located along the north side of McDowell Road.

The primary purpose of this project is to collect and convey 100-year storm flows that have a one percent chance of occurring in any given year. Within the boundaries of the ADMP that would roughly equal four inches of rain received within a 24-hour period.

As many long-time residents know, flooding does occur in this area. The Flood Control District of Maricopa County strives to protect public safety and private property by identifying, designing and building projects such as this.



Public Open House

This project is in the design phase during which the project team decides how the project will look, what elements will be incorporated and ultimately, how it will be constructed. The engineers on this project are Kimley-Horn and Associates, Inc. (KHA). They are working with several subconsultants, including EPG, Inc. which is handling the landscape design.

For more information about this project and to give input to this process, please plan on joining us:

Thursday, November 3 6:00—8:00pm Desert Hills Baptist Church 8326 East McDowell Road

Spook Hill Area Drainage Master Plan

The McDowell Road Basin and Storm Drain project is being designed to meet the guidelines of the Spook Hill Area Drainage Master Plan (ADMP). The ADMP was completed with comprehensive input from a Citizens Committee formed by the City of Mesa. Public involvement played a key role in ensuring that the master plan was completed with the understanding and cooperation of residents in the surrounding neighborhood.

The ADMP provided a recommended drainage master plan that met four key criteria:

No impact to the Usery Mountain Park,

Cost-effective,

Maximize flood protection, and

Not displace any homes or businesses.

As much as possible, this project will utilize the guidelines that were developed with extensive citizen input during the ADMP process. This includes a preference to provide low wash flows for aesthetics, vegetation and wildlife, as well as maintaining the road's rural character.

Following is a map that will give you an idea of where this project is in relation to other planned ADMP and area projects.

Oak Street Basin and Storm Drain

The Oak Street Basin has been identified in the ADMP as a 9.4 acre flood control detention structure located at the northeast corner of Hawes Road and Oak Street, This location was chosen for its proximity to take peak discharges from the Oak Street and Hawes Road storm



A new City of Mesa sulfide station will be constructed just southeast of the basin site. The facility will be about 600 feet south of McDowell Road and will be surrounded by an 8 foot high masonry wall with two rolling gates fronting Sossaman Road. The station will dispense ferrous chloride to control odor in the sewer system. The facility will typically be visited daily by City of Mesa staff and will have remote monitoring capability. The wall, pump house, storage tanks and exposed piping will all be painted Tierra Brown to match the surrounding neighborhood walls and the design will be coordinated with the McDowell Road Basin and Storm Drain project.

Hermosa Vista/Hawes Road Project:

This ADMP project includes a drainage system to capture runoff from the Usery Mountains and surrounding area. The drainage system will consist of a storm drain that will tie into the existing Madrid basin at 90th St. and McDowell Road, go west along McDowell, south along Hawes Road and west along Hermosa Vista Drive. The project also includes a detention basin at Hawes Road and Culver Street. Project design will begin later this year with construction beginning in 2007.

Landscape Considerations

The ADMP identified natural and physical characteristics of the area, including the regional and local setting, geology, ecology and visual resources, as well as a landscape design theme and design considerations and guidelines for the proposed detention basin at Sossaman Road (76th Street):

"...to create an organic landform whose shape, side slopes and bottom surface are undulating and irregular with plant material that transitions from a more unified landscape associated with the Las Sendas subdivision to the more natural setting of the Sonoran Desertscrub desert landscape."

Design considerations and guidelines for the detention basin identified in the ADMP include consideration of the City of Mesa's Site Develop-ment Design Standards, as well as the following considerations. This assessment, together with the considerations and guidelines identified in the ADMP and the input and comments received from the community, will all be used in developing the final design for the detention basin.

- provide a perimeter landscape buffer around the basin,
- create an overall form that appears more organic and less geometric,
- warp and vary side slopes in an irregular pattern,
- undulate the bottom of the basin following the natural topography of the site
- round the top of basin side slopes,
- use vegetation from the City of Mesa's Upland Development Standards,
- scatter vegetation along both sides of the operation and maintenance road,
- place shrubs, groundcovers, rocks and boulders in an irregular pattern along the sides and top of the basin side slopes,
- consider views from McDowell Road, 76th Street, and Las Sendas development,
- install a temporary irrigation system to establish plant material, and,
- use materials, shapes, and colors for structural components that blend with, and are native to, the surroundings.

The project design team has conducted an assessment of the scenic resources of the basin site. This effort has included:

- an analysis of the basin site's Visual Sensitivity (including sensitivity from residential, vehicular and pedestrian viewing areas),
- Landscape Character, and,
- Scenic Quality (including an analysis of vegetation, hydrology, and landform).

Public Involvement

We are currently in the early design stages of the McDowell Road Storm Drain and Basin Design project with about one-third (30%) of the design complete. The November. 3 Open House is the first public meeting on the design of this project and is being held at this early stage to share design and landscape concepts with you and to gather input and answer any questions you may have.

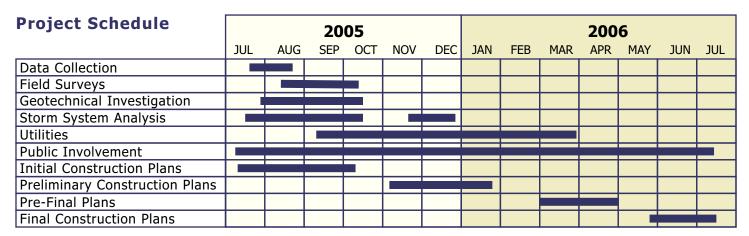
Once we get feedback on this phase of the project, the project team will move forward with the design. The project status will be communicated through a future newsletter and another open house as the design progresses.

The design phase will wrap-up in mid-2006. A contractor will be brought on board to begin construction, tentatively scheduled for early 2007.

For more information on the McDowell Road Storm Drain and Basin project, contact:

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Don Stapley - District 2 **Board of Supervisors** Maricopa County

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